

PONOMAREV, A.N.

Diurnal rhythm and ecology of flowering and pollination in the  
awnless brome grass (*Bromus inermis* Leyss). Nauch. dokl. vys  
shkoly; biol. nauki no.3:132-135 '60. (MIRA 13:8)

1. Rekomendovana kafedroy morfologii i sistematiki rasteniy  
Permskogo gosudarstvennogo universiteta im. A.M. Gor'kogo.  
(Brome grass) (Fertilization of plants)

5.3200(A)  
5.1600

67956

SOV/20-130-1-34/69

5(4)  
AUTHORS: Ponomarev, A. N., Tal'roze, V. L.TITLE: Deuterium-Hydrogen Exchange in the Course of the Reaction of the Hydrogenation<sup>1</sup> of Solid Olefins by Atomic Hydrogen at -196°<sup>2</sup>

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol 130, Nr 1, pp 120-121 (USSR)

ABSTRACT: In the papers by R. Klein and M. Scheer (Refs 1, 2) the hydrogenation of the olefins was carried out at -196°. The authors investigated the deuterium-hydrogen exchange between the gaseous phase and the solid phase under similar conditions with propylene<sup>1</sup> and isobutylene.<sup>1</sup> The reaction which was carried out in a glass bulb was studied by means of a mass spectrometer type MKh-1302 (Refs 3, 4). In the center of the bulb a tungsten filament produced atomic hydrogen. The inner surface of the bulb cooled with liquid nitrogen was coated with a layer of frozen olefin, subsequently deuterium was filled in until a pressure of  $4 \cdot 10^{-2}$  torr was reached, the tungsten filament was switched on, and the change of total pressure and of partial pressure of D<sub>2</sub>, HD and H<sub>2</sub> was measured on the basis of the intensity change of the mass spectral lines. The isobutylene hydrogenation proceeded considerably more slowly than that of propylene,

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Reaction of the Hydrogenation of Solid Olefins by Atomic Hydrogen at  $-196^{\circ}$

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therefore the tungsten filament temperature was kept correspondingly lower in an experiment with propylene to keep hydrogenation approximately at the same velocity. Figure 1 shows the change of the partial pressures and of total pressure. Figure 2 shows the relative change of the total pressure and of the D-content. With isobutylene the velocity of the H-D-exchange is almost equal to the velocity of the H-addition while with propylene the exchange takes place more slowly than the H-addition. The reaction  $\dot{R} + \dot{H} \rightarrow \text{olefin} + H_2$  is assumed, a

reaction between the free alkyl molecules occurring as intermediate stage and atomic H. This process inhibiting hydrogenation

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is regarded as the reason for a limited concentration of the  
frozen free radicals of paraffins and polyethylene (Ref 6).  
There are 2 figures and 6 references, 3 of which are Soviet. 4

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR (Institute of  
Chemical Physics of the Academy of Sciences, USSR)

PRESENTED: August 7, 1959 by N. N. Semenov, Academician

SUBMITTED: August 4, 1959

Card 3/3

KRITSKAYA, D.A.; LARIN, I.K.; PONOMAREV, A.N.; TAL'ROZE, V.L.

Calorimetric study of the solid-phase radiation polymeriza-  
tion of acrylonitrile. Vysokom. soed. 6 no.11:1944-1951 N 164  
(MIRA 1882)

1. Institut khimicheskoy fiziki AN SSSR.

LEVTOV, M.R.; PUCHKOV, M.V.; PONOMAREV, A.N.; ROZENFEL'D, F.A.

Unit for local electric heating of viscous petroleum products in distribution reservoirs. Transp. i khran. nefti i nefteprod. no.11:26-27 '64.  
(MIRA 18:1)

1. Leningradskiy filial Spetsial'nogo konstruktorskogo byuro "Transneft'-avtomatika".

KRITSKAYA, D.A.; LARIN, I.K.; PONOMAREV, A.N.; TAL'ROZE, V.L.

Calorimetric study of the radiation-induced solid phase  
polymerization of acrylonitrile at 135° K. Izv. AN SSSR  
Ser. khim. no.7:1356 JI '64. (MIRA 17:8)

1. Institut khimicheskoy fiziki AN SSSR.

L 16373-65 EWG(j)/EWT(m)/EPF(c)/EWP(j)/T/EWA(h)/EWA(l) Pc-4/Pr-4/Pe-4/Pa-4  
ESD(t)/ASD(m)-3/AS(mp)-2/AFMD(c)/RPL RM

ACCESSION NR: AP4049148

S/0190/64/006/011/1944/1951

AUTHOR: Kritskaya, D. A.; Larin, I. K.; Ponomarev, A. N.; Tal'roze, V. L.

TITLE: Calorimetric study of the solid phase radiation polymerization of acrylonitrile

SOURCE: Vy'sokomolekulyarny'ye soyedineniya, v. 6, no. 11, 1964, 1944-1951

TOPIC TAGS: acrylonitrile, radiation polymerization, calorimetry, solid phase polymerization, polyacrylonitrile

ABSTRACT: A calorimetric method was developed to study low-temperature radiation polymerization using a beam of electrons with energies of several kilovolts. For investigating the mechanism of solid phase polymerization, experiments were carried out at very high radiation doses (high electron current density) and the heat was effectively removed from the layer of the irradiated monomer to avoid overheating. An equation is given for calculating the temperature of the irradiated surface, and a schematic view of the calorimeter user is shown. Two methods of calibration are described. Equations are also given for determining the heat capacity of the calorimeter. Both calibration methods gave results with an accuracy of up to 10%. The frozen monomer layer was 0.1 mm thick, the initial acrylonitrile was purified by distillation, and the temperature of the calorimeter

Cord 1/2



L 16373-65

ACCESSION NR: AP4049143

was about 135K; overheating was 2-3C at most. The correlation between the heat evolution in the layer of frozen acrylonitrile and the amount of energy transmitted to the calorimeter during electron bombardment is plotted. The heat evolved in the acrylonitrile is larger than the amount of heat produced by the energy of electron bombardment. This is due to the exothermic effect of the polymerization. The dependence of the radiation polymerization

With increasing  $I$ ,  $G$  diminishes from 120 for 100 eV at 0.85 Mrad/sec. to 50 at 8.5 Mrad/sec. The average rate of polymerization is strictly proportional to the energy absorbed up to very high degrees of conversion, such as 80%. The polymerization can also be extended beyond the irradiated region. There is evidence that the radiation polymerization of solid acrylonitrile under these conditions proceeds essentially directly during the irradiation of the solid polymer. The correlations are discussed in mathematical terms and compared with the data of other investigators, particularly Japanese researchers. Orig. art. has: 4 figures and 15 formulas.

ASSOCIATION: Institut khimicheskoy fiziki AN SSSR (Institute of Chemical Physics, AN SSSR)

SUBMITTED: 02Dec63

ENCL: 00

SUB CODE: OC, LC

NO REF SOV: 009

OTHER: 003

Card 2/2

AM4036539

BOOK EXPLOITATION

S/

Ponomarev, Aleksandr Nikolayevich

Rocket-armed aircraft (Raketonosnaya aviatsiya) Moscow, Voenizdat, 1964. 0341 p. illus., biblio., graphs. 13,000 copies printed.

TOPIC TAGS: rocket armed aircraft, rocket armed airplane, rocket engine, jet engine, ramjet engine, turbo rocket engine, ramjet rocket engine

PURPOSE AND COVERAGE: The book is intended for fliers, aeronautical engineers, technicians, and anyone interested in aviation... The book provides information on rocket-armed airplanes (mainly non-Soviet), describes their armament and equipment, and gives the outlook for future development. Information on non-Soviet aircraft is taken from data published in non-Soviet books and periodicals. No personalities are mentioned.

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SUB CODE: AC

SUBMITTED: 18Oct63

NO REF SOV: 028

OTHER: 012

DATE ACQ: 04Jun64

Card 3/3

PONOMAREV, A.N.

Temperature dependence of the rate of addition of atomic  
hydrogen to some solid unsaturated hydrocarbons. Kin. i  
kat. 4 no.6:859-862 N-D '63. (MIRA 17:1)

1. Institut khimicheskoy fiziki AN SSSR.

PONOMAREV, A.N.; TAL'ROZE, V.L.

On the theory of low-temperature interaction between atomic hydrogen  
obtained in the gas phase and solid olefins. Kin.i kat. 4 no.5:  
657-661 S-O '63. (MIRA 16:12)

1. Institut khimicheskoy fiziki AN SSSR.

DANILOVA, M.M.; PONOMAREV, A.N.

In memory of Aleksei Aleksandrovich Genkel'; on the 20th anniversary  
of his death. Bot. zhur. 47 no.9:1393-1394 S '62. (MIRA 16:5)  
(Genkel', Aleksei Aleksandrovich, 1908-1942)



PONOMAREV, A.N.; TURBACHEVA, T.P.

Explosive and stepwise flowering of grasses. Dokl. AN SSSR 146  
no.6:1437-1440 0 '62. (MIRA 15:10)

1. Permskiy gosudarstvennyy universitet im. A.M. Gor'kogo.  
Predstavleno akademikom V.N. Sukachevym.  
(Grasses) (Plants, Flowering of)

PONOMAREV, A.N.

Addition of atomic oxygen obtained in the dissociation of oxygen on an incandescent iridium filament to some solid olefins at low temperatures. Izv.AN SSSR.Otd.khim.nauk no.7:1307 J1 '62.  
(MIRA 15:7)

1. Institut khimicheskoy fiziki AN SSSR.  
(Olefins) (Oxygen)

LUKOVNIKOV, A.F.; PONOMAREV, A.N.

Coprecipitation of microgram quantities of molybdenum with some  
inorganic precipitates. Radiokhimiya 4 no.1:19-24 '62.  
(MIRA 15:4)

(Molybdenum--Analysis)

PONOMAREV, A.N.; BANNIKOVA, V.A.

Studying nectar productivity as related to the biology of the  
flower. Uch. zap. Perm. gos. un. 13 no.1:3-11 '60.  
(MIRA 14:11)

(Siberia, Western—Honey plants)

S/062/62/000/007/010/013  
B117/B180

AUTHOR: Ponomarev, A. N.

TITLE: Addition of the atomic oxygen, formed by the dissociation of oxygen molecules on an incandescent iridium filament, to some olefins at low temperatures

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye khimicheskikh nauk, no. 7, 1962, 1307

TEXT: The reactions of atomic oxygen with solid compounds was studied. The method applied was similar to that used for reactions of hydrogen with unsaturated solid compounds. It was found that the atomic oxygen formed on an incandescent iridium filament in a spherical reaction vessel, can be effectively absorbed by ethylene frozen on to the vessel walls at 63°K and by propylene at 77 - 63°K. Analyses of the mass spectra showed that in both cases it is mainly oxygen-containing products which are formed, owing to the addition of oxygen atoms to olefin molecules.

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR (Institute of Chemical Physics of the Academy of Sciences USSR) ✓

Card 1/2

Addition of the atomic oxygen...

S/062/62/000/007/010/013  
B117/B180

SUBMITTED: January 17, 1962

Card 2/2

LOMANOV, Yu.P.; PONOMAREV, A.N.; TAL'ROZE, V.L.

Calorimetric investigation of the reaction of atomic hydrogen with  
solid olefins at 77°K. Kin.i kat. 3 no.1:49-57 '62.

(MIRA 15:3)

1. Institut khimicheskoy fiziki AN SSSR.  
(Hydrogen) (Olefins) (Calorimetry)

PONOMAREV, A.N.; TAL'ROZE, V.L.

Interaction between atomic hydrogen and solid acetylene at 77° K.  
Izv. AN SSSR. Otd.khim.nauk no.9:1716-1717 S '61. (MIRA 14:9)

1. Institut khimicheskoy fiziki AN SSSR.  
(Hydrogen) (Acetylene)



PONOMAREV, A.N.

Cleistogamy in Stipa species. Bot. zhur. 46 no.9:1229-1236 5  
'61. (MIRA 14:9)

1. Permskiy gosudarstvennyy universitet im. A.M.Gor'kogo.  
(Cleistogamy) (Stipa)

34403

S/081/62/000/002/011/107  
B149/B102

5.3300

AUTHORS: Ponomarev, A. N., Tal'roze, V. L.

TITLE: Model studies by the deuterium exchange method of elementary reactions of atomic hydrogen occurring during radiolysis of solid hydrocarbons

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 2, 1962, 78, abstract 2B557 (Tr. Tashkentsk. konferentsii po mirn. ispol'zovaniyu atomn. energii. v. 2. Tashkent AN UzSSR, 1960, 420 - 424)

TEXT: The mechanism of hydrogenation of olefins by atomic hydrogen and the kinetics of deuterium-hydrogen exchange between the gaseous and the solid phases during hydrogenation at  $-196^{\circ}\text{C}$  were studied. The olefin was frozen onto the surface of a spherical container. The dissociation of  $\text{H}_2$  ✓

molecules took place on a heated W filament. Deuterium gas was led into the vessel at a pressure  $P = (4-5) \cdot 10^{-2}$  mm Hg. The partial pressures of  $\text{D}_2$ , HD, and  $\text{H}_2$  were measured from the changes of the corresponding mass.

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S/081/62/000/002/011/107  
B149/B102

Model studies by the ...

spectroscopic bands during the course of the reaction. Experiments were carried out using propylene (I), isobutylene (II), 2-methylbutylene (III), 3-methylbutylene (IV). The rate of hydrogenation of (II) was much lower than that of (I) at equal temperatures and initial pressure of  $D_2$ . Rapid isotope exchange occurred besides the absorption of D. In the case of (II) the rate of exchange approached that of the absorption of D; in the case of (I), it was considerably lower. As with (I) and (II) so also with (III) and (IV) there is an "antibatnost'" of the rate of absorption and the rate of exchange. The process of hydrogenation of an olefin entails the formation in the solid phase of free alkyl radicals, which react rapidly with hydrogen atoms under the conditions of the experiment. No significant concentration of free radicals could be demonstrated by the method of electron paramagnetic resonance. Apart from the recombination reaction, the exchange  $R^\bullet + D^\bullet \rightarrow R^\bullet + H^\bullet$  is possible. The "antibatnost'" of the rate of hydrogenation and of the exchange favors the reaction  $R^\bullet + D^\bullet \rightarrow HD + \text{olefin}$ , leading to deuterium-hydrogen exchange between the solid and the gaseous phases. [Abstracter's note: Complete translation.]

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11.15.10

11.12.10

AUTHORS:

TITLE:

PERIODICAL:

TEXT:

The importance of studying the reactions of atomic hydrogen with olefines for the understanding of the mechanism of radiolysis of organic substances is stressed. In this way the reactions of atomic hydrogen, formed in the primary elementary act of radiolysis on interaction of a fast electron with a molecule, can be elucidated. The object of the present work was the development and application of the method of kinetic calorimetry for the investigation of the interaction of atomic hydrogen with solid hydrocarbons at low temperatures. In the course of the work the method was developed permitting simultaneous measurement of the velocity of absorption of atomic hydrogen and the velocity of heat evolution in the reaction layer (up to  $10^{-4}$  cal/sec) on interaction of hydrogen atoms

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35061

S/195/62/003/001/002/010  
EO71/E136

Lomanov, Yu.P., Ponomarev, A.N., and Tal'roze, V.L.

A calorimetric study of the reactions of atomic hydrogen with solid olefines at 77 °K

Kinetika i kataliz, v.3, no.1, 1962, 49-57

A calorimetric study of the ...

S/195/62/003/001/002/010  
E071/E136

(formed in the gaseous phase) with hydrocarbons at 77 °K. The method was based on the observation of the amount of evaporated nitrogen as a measure of heat evolution and of hydrogen pressure as a measure of hydrogen absorption. The apparatus is described in some detail. It was calibrated by passing an electric current and measuring the amount of evaporated nitrogen. The results obtained indicated that the apparatus is capable of measuring rates of heat evolution of about  $3-5 \times 10^{-4}$  cal/sec and a total heat evolved of the order of  $10^{-2}$  cal. Experiments with solid propylene indicated that the ratio of heat evolved to the amount of absorbed hydrogen during reaction of atomic hydrogen with propylene amounted to 110-115 kcal/mole and remains constant when the thickness of the hydrocarbon layer is  $2 \times 10^{-4}$  cm. This indicated that the heat evolution is almost completely due to the hydrogenation of the olefine and the apparatus measures most of the heat evolved in the reaction layer, i.e. heat losses did not exceed 15%. Thus, under experimental conditions recombination of hydrogen atoms inside the hydrocarbon does not practically take place. For comparison

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A calorimetric study of the ...

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E071/E136

the evolution of heat in a layer of pure solid propane under the same experimental conditions was measured. The velocity of heat evolution was 0.06 of that taking place in propylene. This can be ascribed only to the recombination of hydrogen. For similar experiments with isobutylene the value of heat evolved was 118 kcal/mole, close to the heat of hydrogenation with atomic hydrogen (131.4 kcal/mole). With increasing thickness of the isobutane layer covering isobutylene the ratio of heat evolved to hydrogen absorbed ( $Q/N$ ) increases, indicating that the recombination of hydrogen ( $H^\cdot + H^\cdot \rightarrow H_2$ ) in the hydrocarbon layer becomes noticeable. The evolution of heat due to the above process for an isobutane layer of about  $10^{-4}$  cm becomes comparable to the heat of the hydrogenation of isobutylene (whilst the velocity of absorption of hydrogen is 5-7 times lower than that on the surface of pure butylene). On the basis of the results obtained and the literature data on deuterium-hydrogen exchange an evaluation of the relative role of some reactions is carried out.

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A calorimetric study of the ...

S/195/62/003/001/002/010  
E071/E136

There are 4 figures and 3 tables.

ASSOCIATION: Institut khimicheskoy fiziki AN SSSR  
(Institute of Chemical Physics, AS USSR)

SUBMITTED: July 11, 1961

Card 4/4

X

NIKITIN, Nikolay Ignat'yevich. Prinimali uchastiye: ABRAMOVA, Ye.A., starshiy nauchnyy sotr., kand. khim. nauk; AKIM, E.L., inzh.-tekhnolog; ANTONOVSKIY, S.D., dots., kand. tekhn. nauk; VASIL'YEVA, G.G., inzh.-tekhnolog; ZAYTSEVA, A.F., starshiy nauchnyy sotr., kand. tekhn.nauk; KLENKOVA, N.I., kand. tekhn. nauk; MALEVSKAYA, S.S., kand. khim. nauk; NIKITIN, V.N. starshiy nauchnyy sotr., kand. fiz.-mat. nauk; OBOLENSKAYA, A.V., kand. tekhn. nauk, dotsent; PETROPAVLOVSKIY, G.A., starshiy nauchnyy sotr., kand. tekhn. nauk; PONOMAREV, A.N., kand. tekhn. nauk, dots.; SOLECHNIK, N.Ya., prof., doktor tekhn. nauk; TOKAREV, B.I., inzh.; TSVETAYEVA, I.P., kand. tekhn. nauk; CHOCHIYEVA, M.M., kand. tekhn. nauk; ELIASHBERG, M.G., doktor tekhn. nauk; YUR'YEV, V.I.; KARAPETYAN, G.O., red.izd-va; ZAMARAYEVA, R.A., tekhn. red.

[Wood chemistry and cellulose] Khimiia drevesiny i tselliulozy. Moskva, Izd-vo Akad.nauk SSSR, 1962. 711 p. (MIRA 15:2)

1. Chlen-korrespondent Akademii nauk SSSR (for Nikitin). 2. Zaveduyushchiy kafedroy fizicheskoy i kolloidnoy khimii Lesotekhnicheskoy akademii (for Yur'yev).

(Cellulose)



PONOMAREV, A. N.

LATYSHEV, G. D.

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PHASE I BOOK EXPLOITATION SOV/5410

Tashkentskaya konferentsiya po mirnomu ispol'zovaniyu atomnoy energii, Tashkent, 1959.

Trudy (Transactions of the Tashkent Conference on the Peaceful Uses of Atomic Energy) v. 2. Tashkent, Izd-vo AN UzSSR, 1960. 449 p. Errata slip inserted. 1,500 copies printed.

Sponsoring Agency: Akademiya nauk Uzbekskoy SSR.

Responsible Ed.: S. V. Starodubtsev, Academician, Academy of Sciences Uzbek SSR. Editorial Board: A. A. Abdullayev, Candidate of Physics and Mathematics; D. M. Abdurasulov, Doctor of Medical Sciences; U. A. Arifov, Academician, Academy of Sciences Uzbek SSR; A. A. Borodulina, Candidate of Biological Sciences; V. N. Ivashev; G. S. Ikramova; A. Ye. Kiv; Ye. M. Lobanov, Candidate of Physics and Mathematics; A. I. Nikolayev, Candidate of Medical Sciences; D. Nizhanov, Candidate of Chemical Sciences; A. S. Sadykov, Corresponding Member, Academy of Sciences USSR, Academician, Academy of Sciences Uzbek SSR; Yu. N. Talanin,

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Transactions of the Tashkent (Cont.)

SOV/5410

Candidate of Physics and Mathematics; Ya. Kh. Turakulov, Doctor of Biological Sciences. Ed.: R. I. Khamidov; Tech. Ed.: A. G. Babalchanova.

PURPOSE : The publication is intended for scientific workers and specialists employed in enterprises where radioactive isotopes and nuclear radiation are used for research in chemical, geological, and technological fields.

COVERAGE: This collection of 133 articles represents the second volume of the Transactions of the Tashkent Conference on the Peaceful Uses of Atomic Energy. The individual articles deal with a wide range of problems in the field of nuclear radiation, including: production and chemical analysis of radioactive isotopes; investigation of the kinetics of chemical reactions by means of isotopes; application of spectral analysis for the manufacturing of radioactive preparations; radioactive methods for determining the content of elements in the rocks; and an analysis of methods for obtaining pure substances. Certain

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instruments used, such as automatic regulators, flowmeters, level gauges, and high-sensitivity gamma-relays, are described. No personalities are mentioned. References follow individual articles.

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RADIOACTIVE ISOTOPES AND NUCLEAR RADIATION  
IN ENGINEERING AND GEOLOGY

Lobanov, Ye. M. [Institut yadernoy fiziki UzSSR - Institute of Nuclear Physics AS UzSSR]. Application of Radioactive Isotopes and Nuclear Radiation in Uzbekistan

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Taksar, I. M., and V. A. Yanushkovskiy [Institut fiziki AN Latv SSR - Institute of Physics AS Latvian SSR]. Problems of the Typification of Automatic-Control Apparatus Based on the Use of Radioactive Isotopes

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Transactions of the Tashkent (Cont.)

SOV/5410

Pleyshman, D. G., V. V. Glazunov, and L. G. Shakhidzhanyan  
[Institut evolyutsionnoy fiziologii im. T. M. Sechenova AN SSSR -  
Institute of Evolutionary Physiology imeni T. M. Sechenova  
AS USSR]. Use of Scintillation Beta-Spectrometry for De-  
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Biological Objects 416

Fenomarev, A. N., and V. L. Tal'roze. [Institut khimicheskoy  
fiziki AN SSSR - Institute of Chemical Physics AS USSR]. Use of  
the Deuteron-Exchange Method for Studying, Under Simulated Con-  
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Berezkin, V. G. [Institut neftekhimicheskogo sinteza AN SSSR -  
Institute of Petrochemical Synthesis AS USSR]. Methods and  
Equipment for the Chromatographic Investigation of the Products  
of Radiolysis of Hydrocarbons 425

Slovokhotova, N. A., A. T. Koritskiy, and N. Ya. Buben. [In-  
stitute of Chemical Physics AS USSR]. Double Links in Poly-  
Card 19/20

PONOMAREV, A.N.

Effect of ammonium-fluosilicate on wood. Trudy Inst. biol. UFAN  
SSSR no.17:51-53 '60. (MIRA 14:4)  
(AMMONIUM FLUCSILICATES) (WOOD-PRESERVATION)

PONOMAREV, A.N.; LYKOVA, Ye.I.

Cleistogamy in the goosefoot family. Dokl. AN SSSR 135 no.5:1262-1265 D '60. (MIRA 13:12)

1. Permskiy gosudarstvennyy universitet im. A.M.Gor'kogo. Predstavleno akademikom V.N. Sukachevym.  
(Cleistogamy) (Goosefoot)

PONOMAREV, A.N.

Protandry in the carrot family. Dokl. AN SSSR 135 no.3:750-752  
N '60. (MIRA 13:12)

1. Permskiy gosudarstvennyy universitet im. A.M.Gor'kogo. Predstavleno  
akademikom V.N.Sukachovym.  
(Anniaceae) (Fertilization of plants)

POHOMAREV, A.N., general-polkovnik inzhenerno-tekhnicheskoy sluzhby

The struggle for speed. Vest.Vozd.Fl. no.11:69-74 N '60.  
(MIRA 13:11)

(Airplanes--Speed)



PONOMAREV, Aleksandr Nikolayevich; DRUZHININ, M.V., red.;  
SINYAKOV, S.P., general-leutenant aviatsii, retsenzent;  
MYASNIKOVA, T.F., tekhn. red.

[Rocket aircraft] Raketonosnaia aviatsiia. Moskva, Voen-  
izdat, 1964. 341 p. (MIRA 17:2)

SEMENOVA, L.M.; ~~PONOMAREV, A.P.~~

Mechanization of controlling operations in the production of slide  
calipers. Stan.i instr. 27 no.9:29-30 S '56. (MLBA 9:11)  
(Calipers)

DRAGOLYUBOV, Petr; SATAROV, N.A. [translator]; PONOMAREV, A.P.,  
red.; MURASHOVA, L.A., tekhn. red.

General TSviatko Radionov. Translated from the Bulgarian.  
Moskva, Voenizdat, 1963. 94 p. (MIRA 16:11)  
(Radionov, TSviatko, d.1942)

# NOTES ON THE POPULATION

2007/03/22

Рассказчик: конферентный профессор 1 преподаватель педагогический институт.

*Primeneniye ul'trazvukov k issledovaniyu veschestva; tradyatsionnoy, 779. 9* (Application of Ultrasonics is the Study of Substances, No. 9) Moscow, 1968. 100 copies printed.

34. : V. P. BOGDANOV, Professor, and I. I. KUDRYAVTSEV, Professor.

**PURPOSE:** This collection of articles is intended for scientists specializing in ultrasonics, and for those interested in the application of ultrasonics to the study of the properties of materials, and to the quality control of mechanical and structural elements.

**COMMENT:** The collection contains the transactions of the All-Russian Conference of Professors and Teachers of Pedagogical Institutes. The articles report on recent theoretical and experimental investigations in the field of acoustics, the application of ultrasonics to the study of

**27**

**Qualifications of Witnesses (Cont.)**

246/242

Kasparian, A. V., and L. O. Meloyan. "Reversibly Polytalks. in-  
(Various Polymers and Their Dependence of Speed of  
Ultrasound and Certain Physicochemical Properties of Liquid  
and Temperature

2

Oxynechembiter, N. P. (Karak Pedagogical Institute). Speed of Ultrasonic with Near-Solidification Temperatures in Certain Organic Substances

6

Sarkisov, M. A. [Moscow Oblast' Pedagogical Institute imeni  
Measurement of Absorption of Ultrasonic Waves in  
Kryukhaya]. *International Transition Region*

8

Rustern, A. V. and I. B. Rudzviser, (Moscow Oblast; Pedagogical Institute named Krupskaya). Investigation of the behavior of birds during nesting.

4

Maksimov, Ya. S. (Yaroslav). ped. inst (Yaroslav). Pedagogical Institute. Problem of the Relaxation Mechanism in Butyl Acetate

127

... .. (Cont.)

202

Kapustin, A. P. [Mosk. Ped. in-t imeni Lenina (Moscow Pedagogical Institute imeni Lenin)]. Ech-Figures in Terpene Monohydrate Crystals. Application to construction.

5

✗ Eapetis, A. P. and V. Ye. Evlyamayev (Moscow Pedagogical Institute named Lenin and Int'nalist. x USSR (Institute of Crystallography of the Academy of Sciences, USSR)). Effect of the Variation of Concentration in Thin Layers

137

**Elizaveta V. A. K. Prokha**, and **V. S. Cherkashin**, (Krasnoyarsk. ped. in-s (Krasnoyarsk Pedagogical Institute), Krasnoyarsk. In-s. field of USSR (Krasnoyarsk Institute of Physics of the Academy of Sciences, USSR)). Effect of Ultrasound on the Magnetic Properties of Ferromagnetics

132

Endryatsev, B. B., A. S. Medvedev, and A. K. Ponomarev [Moscow  
Oblast' Pedagogical Institute (Issl. Trudy)]. Effect of Ultra-  
violet on the Incandescence of Phosphors

2

2/5 1963

CONOMAREV, A.P.

S/058/60/000/008/009/009  
A005/A001

Translation from: Referativnyy zhurnal, Fizika, 1960, No. 8, p. 348, # 21263

AUTHORS: Kudryavtsev, B.B., Medvedev, A.N., Ponomarev, A.P.

TITLE: The Influence of the Ultrasonic on the Luminescence of Phosphors

PERIODICAL: V sb.: Primeneniye ul'traakust. k issled. veshchestva., No. 9,  
Moscow, 1959, pp. 139-145

TEXT: The authors investigated experimentally (the unit design is presented) the influence of the ultrasonics on the kinetics of luminescence of the light amount stored by phosphors:  $ZnS \cdot CdS \cdot Cu$  and  $ZnS \cdot Cu$ . It turned out that the intensity of the luminescence process of the light amount stored by a luminophor increases with increasing ultrasonic intensity. The enhancing effect of the ultrasonic is caused in the main by the heating of the luminophor in consequence of the acoustic energy absorption. When considering the heating under the ultrasonic effect, it is necessary to take into consideration the local

Card 1/2

AID P - 5383

Subject : USSR/Engineering  
Card 1/1 Pub. 103 - 13/28  
Authors : Semenova, L. M., and A. P. Ponomarev  
Title : Mechanized routine inspection of vernier calipers  
Periodical : Stan. i instr., 9, 29-30, S 1976  
Abstract : The authors describe two specially designed apparatuses for inspection of manufactured vernier calipers. Two photos.  
Institution : Interchangeability Bureau of the Ministry of the Machine-Tool and Instrument Industry (MS i IP) and the "Kalibr" (Caliper) plant in Moscow.  
Submitted : No date

BLOK, Ye.M.; UBRAGIMOV, M.; KANDALOV, S.A.; KARAKHANOV, M.; PONOMAREV,  
A.S.; PARAMOSHKIN, I.M.; YUSUPOV, P.; USTIMENKO, I.L.,  
red.-sostavitel'; SULTANOV, G., red.; NADZHIMOV, G., red.;  
UMANSKIY, P.A., tekhn.red.

[Achievements of Uzbekistan in forty years of Soviet rule;  
statistical collection] Uzbekistan za 40 let Sovetskoi  
vlasti; statisticheski sbornik. Tashkent, Gos.isd-vo  
Uzbekskoi SSR, 1958. 134 p. (MIRA 12:11)  
(Uzbekistan--Statistics)

PONOMAREV, A. S.

O vybere skhemy benzosistemy. (Tekhnika vozdushnogo flota, 1945, no. 9,  
p. 19-38, illus., diagrs.)

Title tr.: Selection of a fuel-supply system.

TL504. Th 1945



ACC NR: AP7005690

(A)

SOURCE CODE: UR/0413/67/000/002/0160/0160

INVENTOR: Ponomarev, A. S.

ORG: None

TITLE: A. S. Ponomarev's wheel chock for restraining an airplane when checking engines on the ground. Class 62, No. 190800

SOURCE: Izobreteniya, promyshlennyye obratzy, tovarnyye znaki, no. 2, 1967, 160

TOPIC TAGS: auxiliary aircraft equipment, aircraft maintenance equipment

ABSTRACT: This Author's certificate introduces a wheel chock for restraining an airplane when checking engines on the ground. The device consists of a base with pins, a retaining arch, struts with pins and a covering on the sides and front. The unit is designed for holding an aircraft fast in one place when checking engines on the ground and is made so that the wheels may roll freely out of the chocks when the engine stops. All joints in the chock are rigid and the ratio between the radius of the wheel and the principal dimensions of the device are as follows: wheel radius to depth of seating in the chock--1-1.5; wheel radius to height of the pins in the base--6-9; wheel radius to height of the chock--1-1.5. The angle of inclination of the chocks to the horizontal is  $55 \pm 10^\circ$ .

Card 1/2

UDC: 629.13.01/06

Card 2/2

PONOMAREV, A.S.; TIMOFEYEV, D.P.

Diffusion coefficients in secondary pores of granulated zeolites  
Dokl. AN SSSR 150 no.5:1081-1083 Je '63. (MIRA 16:8)

1. Institut fizicheskoy khimii AN SSSR. Predstavleno akademikom  
M.M.Dubininyam.

(Zeolites) (Diffusion)

VARESHIN, Aleksey Mikhaylovich [deceased]; PONOMAREV, Andrey Sergeyevich;  
DEDKOV, Boris Petrovich; GOL'DSHTEYN, L.Ye., red.; PEVZNER, N.I., red.

[The city of Syzran'; an historical and economic essay] Go-  
rod Syzran'; istoriko-ekonomicheskii ocherk. Kuibyshev,  
Kuibyshevskoe knizhnoe izd-vo, 1964. 197 p. (MIRA 17:8)

PONOMAREV, A.S.

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PHASE I BOOK EXPLOITATION

SOV/6246

Soveschchaniye po tseolitam. 1st, Leningrad, 1961.

Sinteticheskiye tseolity; polucheniye, issledovaniye i primeneniye  
(Synthetic Zeolites: Production, Investigation, and Use). Mos-  
cow, Izd-vo AN SSSR, 1962. 286 p. (Series: Its: Doklady)  
Errata slip inserted. 2500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye khimicheskikh  
nauk. Komisiya po tseolitam.

Resp. Eds.: M. M. Dubinin, Academician and V. V. Serpinskiy, Doctor  
of Chemical Sciences; Ed.: Ye. G. Zhukovskaya; Tech. Ed.: S. P.  
Golub'.

PURPOSE: This book is intended for scientists and engineers engaged  
in the production of synthetic zeolites (molecular sieves), and  
for chemists in general.

Card 1/23

**Synthetic Zeolites: (Cont.)**

30V/6246

**COVERAGE:** The book is a collection of reports presented at the First Conference on Zeolites, held in Leningrad 16 through 19 March 1961 at the Leningrad Technological Institute imeni Lensovet, and is purportedly the first monograph on this subject. The reports are grouped into 3 subject areas: 1) theoretical problems of adsorption on various types of zeolites and methods for their investigation, 2) the production of zeolites, and 3) application of zeolites. No personalities are mentioned. References follow individual articles.

**TABLE OF CONTENTS:**

Foreword	3
Dubinin, M. M. Introduction	5

Card 2/4 3

Synthetic Zeolites: (Cont.)

807/6246

THEORETICAL PROBLEMS OF ADSORPTION ON ZEOLITES.  
METHODS OF INVESTIGATION

Dubinin, M. M., Z. A. Zhukova, and N. V. Kel'tsev. Appli-  
cability of the Potential Theory to the Adsorption of  
Gases and Vapors by Synthetic Zeolites

7

Bering, B. P., V. V. Serpinskiy. Adsorption Isotherms for  
Synthetic Zeolites Within the Framework of the Potential  
Theory

18

Timofeyev, D. P., O. N. Kabanova, I. T. Yerashko, and A. S.  
Ponomarev. The Role of the Secondary Porosity of Zeolites  
in the Kinetics of Water-Vapor Sorption

24

Misin, M. S., B. V. Adrianova, and M. N. Adrianov. Investi-  
gation of the Adsorption and Kinetic Properties of Granu-  
lar Zeolites With the Aid of Thoron

31

Card 3/4 3

POHOMAREV, A.S.

Highly sensitive catharometer for the chromatographic analysis  
of gases. Zav.lab. 26 no.5:634-636 '60. (MYRA 13:7)

1. Institut fizicheskoy khimii Akademii nauk SSSR.  
(Gas chromatography)

1. PONOMAREV, A. S.
2. USSR 600
4. Reindeer
7. Correct organization of work in breeding reindeer, Sots. zhiv. 14, No. 12, 1952.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.



POPSUYENKO, Aleksandr Profir'yevich; PRIYMENKO, Pavel Aleksandrovich;  
KOSIKOV, Ivan Mikhaylovich; PONOMAREV, Aleksandr Timofeyevich;  
KUNKIN, V.R., redaktor; STIKHNO, T.V., tekhnicheskii redaktor

[Experience in reducing idle time of locomotives in repair shops;  
the Ilanskiy depot of the Krasnoyarsk Railroad] Opyt sokrashcheniia  
prostoiia parovozov v remonte; depo Ilanskaia Krasnoiarskoi zheleznoi  
dorogi. Moskva, Gos.transp.zhel-dor. izd-vo, 1957. 71 p. (MLRA 10:10)  
(Ilanskiy--Locomotives--Maintenance and repair)

163200

22581  
S/044/60/000/010/004/021  
C111/C333

**AUTHOR:** Ponomarev, A.T.

**TITLE:** On the question concerning the limit values of the integral of Cauchy type for functions of several complex variables

**PERIODICAL:** Referativnyy zhurnal, Matematika, no. 10, 1960, 70, abstract 11538. (Uch.zap.Kishinevsk.un-t., 1959, 32, 281-284)

**TEXT:** The author investigates the limit values of the integral of Cauchy type which is extended over the skeleton of a regular bi-cylindrical domain of the space of two complex variables (Fuks, B.A., Theory of analytic functions of several complex variables, M., 1948, 2? ). [Abstracter's note: The margin of the photostat is unreadable; the datum of the number of pages is therefore incomplete]. It is supposed that the density in the considered integral of Cauchy type is analytic on the skeleton. The generalized Sokhotskiy formula is proved for the limit values of these integrals. There are misprints in the paper.

Note of the reviewer: Simultaneously with the reviewed paper there was published an article by V.A.Kakichev (RZhMat, 1960, 7518) in Card 1/2

On the question concerning the...

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S/044/60/000/010/004/021  
C111/C333

which the same questions are investigated under more generalized assumptions ( the density in the integral of Cauchy type is not supposed to be analytic in the points of the skeleton etc.).

[Abstracter's note: Complete translation.]

Card 2/2

L 9281-66 EWT(d)/EWT(m)/EWP(w)/EWA(d)/EWP(v)/EWP(t)/EWP(k)/EWP(z)/EWP(l)/EWA(h)/  
 ACC NR: AP6000240 ETC(m) IJP(c) SOURCE CODE: UR/0198/65/001/010/0038/0045

AUTHOR: Bozhinskiy, A. N. (Moscow); Ponomarev, A. T. (Moscow)  
 JD/VW/EM

ORG: Military Aeronautical-Engineering Academy im. Zhukovskiy (Voyenno-  
 vozdushnaya inzhenernaya akademiya)

TITLE: Experimental investigation of buckling of cylindrical shells under axial  
 compression combined with internal pressure

SOURCE: Prikladnaya mekhanika, v. 1, no. 10, 1965, 38-45.

TOPIC TAGS: *cylindric shell structure*, shell buckling, internal stress, aluminum  
 alloy, elastic stress, plasticity, buckling, pipe

ABSTRACT: The results of an experimental investigation of the buckling behavior  
 of round duralumin tubes in both elastic and plastic regions under axial compression  
 combined with internal pressure are presented. The effect of the magnitude of the  
 pressure on the value of critical (buckling) compression stress and the influence of  
 the path of loading are studied. A critical evaluation of available theoretical  
 solutions is also presented. The testing of aluminum-alloy specimens (180 mm in  
 diameter, 180 mm long, 0.5 mm wall thickness) by using various paths of loading  
 (the sequence in applying the compressive force and internal pressure) in elastic  
 and plastic regions is described in detail. In tests beyond the elastic limit, the  
 effect of the loading path in the prebuckling state on the magnitude of the buckling  
 load was estimated. The obtained experimental data are given in a table and are

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ACC NR: AP6000240

3

compared in diagrams with theoretical values of the buckling stresses calculated by using the solutions by B. O. Almroth and D. O. Brush (for the elastic region) and by E. I. Grigolyuk (for the plastic region). The experimental data make clear the very weak effect of the path of loading on the magnitude of the buckling load. The experimental values of the buckling stress are lower than the analytical ones in both elastic and plastic regions. It was ascertained that at the beginning, the buckling stress grows with increasing internal pressure and reaches its maximum (in the elastic region), then gradually drops to zero (in the plastic region). The experiments demonstrated the inadequacy of theoretical solutions, especially in the transient region. Orig. art. has: 7 figures, 1 formula, and 1 table. [VK]

SUB CODE: 20, 11,13/SUBM DATE: 17Feb65/ ORIG REF: 002/ OTH REF: 005/ ATD PRESS:

4159

  
Card 2/2

BOZHINSKIY, A.N. (Moskva); PONOMAREV, A.T. (Moskva)

Experimental investigation of the buckling of cylindrical shells under axial compression and internal pressure.

Prikl. mekh. 1 no.10:38-45 '65. (MIRA 18:12)

1. Voenno-vozdushnaya inzhenernaya akademiya imeni Zhukovskogo.  
Submitted February 17, 1965.

PONOMAREV, A. V.

"Effectiveness of Measures for Control of Pests and Diseases of Hemp on Collective Farms in Novgorod-Seversky Raion, Chernozem Oblast," Itogi Nauchno-Issledovatel'skikh Rabot Vsesoiuznogo Instituta Zashchity Rastenii za 1936, Goda, part 2, 1937,  
pp. 368-371. 423.92 L541

PA 19762

PONOMAREV, A. V.

USSR/Communications - Equipment  
Telephone lines

Apr/May 1946

"Greater Development of Lines of Communication  
Acquired During the War," A. V. Ponomarev, 2 pp

"Vestnik Svyazi - Elektro Svyaz'" No 4/5 (73-74)

Discusses the need to make full use during "peace  
time" of communications lines constructed during  
the war. Mentions such lines as the Moscow-  
Sverdlovsk-Chelyabinsk trunk line and the Moscow-  
Smolensk-Minsk trunk line among others.

19762



BELOV, K.P.; LEVITIN, R.F.; IONOMANEV, B.R.

Magnetostriction of rare earth metals in the paramagnetic, antiferromagnetic, and ferromagnetic regions. Zhur.eksp. i teor.fiz. 49 no.6:1733-1740 D '65.

(MIRA 1981)

1. Moskovskiy gosudarstvennyy universitet. Submitted July 15, 1965.

L 23166-66 EWT(m)/EWP(t) IJP(c) JD/JG

ACC NR: AF6002712

SOURCE CODE: UR/0056/65/049/006/1733/1740

AUTHOR: Belov, K. P.; Levitin, R. Z.; Ponomarev, B. K.

ORG: Moscow State University (Moskovskiy gosudarstvennyy universitet)

TITLE: Magnetostriction of rare-earth metals in the paramagnetic, antiferromagnetic, and ferromagnetic ranges

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 49, no. 6, 1965, 1733-1740

TOPIC TAGS: rare earth metal, terbium, dysprosium, holmium, erbium, magnetostriction, paramagnetism, antiferromagnetism, ferromagnetism, pulsed magnetic field

ABSTRACT: The magnetostriction of polycrystalline Tb, Dy, Ho, and Er was measured in pulsed magnetic fields up to 150 koe in the temperature interval 90 to 300K. In earlier investigations the saturation magnetostriction was measured only in individual easy directions. In this investigation, the magnetostriction was also measured below the magnetic-ordering temperature. The measurement was by means of a remote piezoelectric sensor, which will be described elsewhere. The temperature was maintained constant within  $\pm 0.3K$ , and the temperature gradient along the sample did not exceed 2K. The relative strain was measured with accuracy 3 to 5% and its

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L 23166-66

ACC NR: AP6002712

absolute value with accuracy 10 to 12%. A large magnetostriction (of the order of  $100 \times 10^{-6}$ ) was observed in all metals in the paramagnetic region. In Ho, magnetostriction due to the transition from the antiferromagnetic to the ferromagnetic state was observed. In the ferromagnetic state, the magnetostriction of Tb and Dy reaches values of  $3300 \times 10^{-6}$  and  $2200 \times 10^{-6}$ , respectively. In Tb and Dy the magnetostriction was measured only in fields above the critical value for the transition from the helicoidal to the ferromagnetic state (0.2 and 10 koe for Tb and Dy). The magnetostriction of all three metals was positive, in contrast with the case of Er, where it was negative. Orig. art. has: 9 figures and 10 formulas.

SUB CODE: 20/ SUBM DATE: 15Jul65/ ORIG REF: 007/ OTH REF: 008

Card 2/2

L 07102-67 EWT(1)/EWT(m)/EWP(t)/EPI IJP(c) JD/JG

ACC NR: AP6029114

SOURCE CODE: UR/0048/66/030/006/0981/0983

AUTHOR: Levitin, B.Z.; Ponomarev, B.K.

ORG: none

TITLE: Contribution of the <sup>2</sup>magnetoelastic energy to the uniaxial magnetic anisotropy energy of dysprosium Report, All-Union Conference on the Physics of Ferro- and Anti-ferromagnetism held 2-7 July 1965 in Sverdlovsk

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya. v. 30, no. 6, 1966, 981-983

TOPIC TAGS: rare earth, dysprosium, magnetostriction, magnetic anisotropy

ABSTRACT: The authors have measured the magnetostriction of dysprosium single crystals in a hard magnetization direction (the c axis) in pulsed fields up to 150 kOe at temperatures from 129 to 300° K in order to test the hypothesis of A.Clark, B.DeSavage, and R.Bozorth (Phys. Rev., A. 138, 216 (1965)) that the large uniaxial magnetic anisotropy of dysprosium is due to magnetostrictive interaction. The magnetostriction was found to vary quadratically with the field in the paramagnetic region (above 178° K) and to reach values of the order of  $3 \times 10^{-3}$ . At lower temperatures the magnetostriction increased rapidly and reached the enormous value of  $0.7 \times 10^{-2}$  at 129° K in a 150 kOe field, where it was still far from saturated. Possible reasons for the large magnetostriction are discussed briefly, and it is concluded that dysprosium has a helicoidal magnetic structure at temperatures between 85 and 178° K. The

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L 07102-67

ACC NR: AP6029114

3

magnetoelastic and uniaxial magnetic anisotropy energies of dysprosium are compared, and it is shown that the former is an appreciable fraction of the latter. It is concluded that the magnetoelastic interaction must be taken into account in any theory of the magnetic anisotropy of the rare earth metals. The magnetostriction measurements in pulsed fields at temperatures below 129° K were not well reproducible; this is ascribed magnetostrictive deformation of the specimens beyond their elastic limits. The authors thank K.P. Belov for his interest and valuable advice. Orig. art. has: 3 formulae and 1 table.

SUB CODE: 20

SUBM DATE: 00

ORIG. REF: 003

OTH REF: 006

Card

2/2

ACC NR: AP6022028

SOURCE CODE: UR/0120/66/000/003/0188/0190

AUTHOR: Ponomarev, B. K.; Levitin, R. Z.

ORG: Physics Department, MGU (Fizicheskiy fakul'tet MGU)

TITLE: Measurement of magnetostriction in strong pulsed magnetic fields

SOURCE: Pribery i tekhnika eksperimenta, no. 3, 1966, 188-190

TOPIC TAGS: magnetostriction, electronic measurement, pulsed magnetic field

ABSTRACT: A method for measuring magnetostriction in strong magnetic fields ranging from 150 to 200 kOe with a piezoelectric transducer is described. The pulsed magnetic field is created by discharging a large capacitor ( $C = 3000 \mu\text{f}$ ,  $V_{\text{max}} = 5 \text{ v}$ ) through a solenoid; this set-up established magnetic fields of 150 to 200 kOe with pulse durations of 10 msec. The piezoelectric transducer consists of two rings made from TsTS-19 polarized piezoceramic (outside and inside diameters, 23 and 4 mm; thickness, 1 mm). The specimen under study is cylindrically-shaped with approximate length and diameter of 1 cm and 1 mm; with such dimensions the nonuniformity of the magnetic field does not exceed 5% throughout the specimen. Sensitivity to deformation of the transducer is  $1.24 \pm 0.10 \text{ v}/\mu$ ; the overall sensitivity of the set-up is  $(6.0 \pm 0.5) 10^{-7} \text{ cm/mm}$  of the recording oscillograph scale. The overall accuracy of determining absolute values of magnetostriction in pulsed magnetic fields is 13%. In conclusion, the authors thank K. P. Belov for constant interest in the work, N. I. Shpin'kov and

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UDC: 621.317.795:538.652

ACC NR: AP6022028

G. I. Katayev for valuable advice, V. I. Sokolov and Yu. V. Yergin for measuring the magnetostriction in static fields. Orig. art. has: 3 figures.

SUB CODE: 20/ SUBM DATE: 09Feb65/ ORIG REF: 001/ OTH REF: 002

Card 2/2

PONOMAREV, B.M.

ALEKSEYEVSKIY, N.A.; PONOMAREV, B.M., redaktor; PARTSEVSKIY, V.N.,  
redaktor.

[Dissemination of practice in rapid excavation work in northern  
Ural bauxite mines] Obobshchenie opyta skorostnogo provedeniia  
gornyykh vyrabotok na Severoural'skikh boksitovykh rudnikakh.  
Moskva, Gos. nauchno-tekhn. iss-vo lit-ry po chernoi i tsvetnoi  
metallurgii, 1954. 115 p. (MLRA 7:8)  
(Mining engineering) (Ural Mountains--Bauxite) (Bauxite--  
Ural Mountains)



SISAKYAN, N.M., akademik; MINTS, I.I., akademik; SATPAYEV, K.I., akademik;  
FRUMKIN, A.N., akademik; SHEMYAKIN, M.M., akademik; SOBOLEV, S.L.,  
akademik; SHULEYKIN, V.V., akademik; BITSADZE, A.V.; MEL'NIKOV, N.V.;  
KHOVSTOV, V.M.; ROMASHKIN, P.S.; ABDULLAYEV, Kh.M.; DADYKIN, V.P.,  
doktor biol.nauk; OBOLENTSEV, R.D., doktor khim.nauk; ~~PONOMAREV~~,  
B.N.; BLAGONRAVOV, A.A., akademik; ARTSIMOVICH, L.A., akademik;  
KOSTENKO, M.P., akademik; NALIVKIN, D.V., akademik

Discussion of the report. Vest.AN SSSR 31 no.3:27-47 Mr '61.  
(MIRA 14:3)

1. AN Kazakhskoy SSSR (for Satpayev). 2. Chleny-korrespondenty  
AN SSSR (for Bitsadze, Mel'nikov, Khvostov, Romashkin, Abdullayev,  
Ponomarev).

(Research)

PONOMAREV, B.N.; IVANKINA, N.F.

Maikop Combine increases the production output of furniture. Der.  
prom. 10 no.11:18-20 N '61. (MIRA 14:10)

1. Maykopskiy mebel'nyy kombinat.  
(Maikop--Furniture industry)

PONOMAREV, B.N., inzh.

Mechanizing the intershop conveying of chairs. Der.prom. 7  
no.3:25 Mr '58. (MIRA 11:4)

(Conveying machinery)

USPENSKIY, V.A.; RADCHENKO, O.A.; GLEBOVSKAYA, Ye.A.; SHISHKOVA, A.P.;  
MEL'TSANSKAYA, T.N.; INDENBOM, F.B.; Prinimali uchastiye:  
KOLOTOVA, L.F., khimik; CHAGINA, T.P., tekhnik; BASKINA, T.B.,  
laborant; VIKULINA, M.N., laborant; POLOVNIKOVA, I.A., fizik;  
PETROV, A.K., tekhnik; PONOMAREV, B.P., laborant; KHYAMYALYAYNIN,  
L.B., laborant; KLOCHKOV, B.N., laborant; RAGINA, G.M., vedushchiy  
red.; SAFRONOVA, I.M., tekhn.red.

[Basic processes of the transformation of bitumens in nature  
and the problems of their classification] Osnovnye puti pre-  
obrazovaniia bitumov v prirode i voprosy ikh klassifikatsii.  
Leningrad, Gos.nauchno-tekhn.izd-vo neft.i gorno-toplivnoi  
lit-ry Leningr.otd-nie, 1961. 314 p. (Leningrad. Vsesoiuznyi  
nauchno-issledovatel'skii geologorazvedochnyi institut. Trudy,  
no.185). (MIRA 15:4)

(Bitumen--Geology)

PONOMAREV, B.P.

Agrometeorological aspect of spring harrowing of winter crops.  
Meteor. i gidrol. no.4:31-34 Ap '61. (MIRA 14:3)  
(Meteorology, Agricultural) (Tillage)

PONOMAREV, B.P.

Effect of the agrometeorological conditions on the weight of 1000  
winter wheat and rye kernels in the southern half of the European  
part of the U.S.S.R. Trudy TSIP no.131:101-121 '63. (MIRA 16:9)

~~PODOMAREV, B.P.~~

Evaluating agrometeorological conditions influencing the growth  
of spring wheat during the period of grain formation. Trudy  
TSIP no.88:15-20 '59. (MIRA 12:8)  
(Meteorology, Agricultural) (Wheat)

PONOMAREV, B.P.

Phenoclimatic characteristics of the germination of spring  
wheat in the steppe and forest steppe areas of the U.S.S.R.  
Mat. Fen. kom. Geog. ob-va SSSR no.1:27-33 '62.  
(MIRA 17:3)



PONOMAREV, B.P.

Evaluation of the agrometeorological conditions for growing  
spring wheat in the steppe and forest steppe zones of the R.S.F.S.R.  
Trudy TSIP no.101.:3-25 '62. (MIRA 15:9)  
(Crops and climate) (Wheat)

1ST AND 2ND ORDERS																										3RD AND 4TH ORDERS																									
PROCESSES AND PROPERTIES INDEX																																																			
<div style="display: flex; justify-content: space-between;"> <span>ca</span> <span>11b</span> </div> <p>The concentration of antitoxic sera. P. A. ASHIMARIN AND A. V. PONOMAREV. <i>Ark. Biol. Nauk</i> 28, 335-7(1928).--The Brunner and Pinkus method (C. A. 2, 282) of pptg. the antitoxic fraction of antidiphtheria serum by <math>\text{Na}_2\text{SO}_4</math> was simplified by the use of <math>\text{CaCl}_2</math> for the removal of the excess sulfate, instead of dialysis. A concn. of 5.0 times was effected. It is claimed that the 0.05% <math>\text{Na}_2\text{SO}_4</math> and the small amt. of Ca remaining in the resulting soln. have no deleterious effect. W. A. PERLEWICH</p>																																																			
<div style="display: flex; justify-content: space-between;"> <span>ASACSLA METALLURGICAL LITERATURE CLASSIFICATION</span> <span>62</span> </div>																																																			

1ST AND 2ND GRADES																										3RD AND 4TH GRADES																									
PROCESSING AND PREPARATION NOTES																																																			
<div style="display: flex; justify-content: space-between;"> <span>Ca</span> <span>11g</span> </div> <p>The effects of direct injection of coal tar into the subarachnoid space of rabbits.  A. V. PONOMAREV. <i>Arch. Biol. Nauk</i> 28, 471-80(1928).--The injections produced trophic changes in the internal organs (lungs, stomach, periphery of intestine, heart) innervated by the vagus system. These changes are regarded as being secondary to a chronic intoxication of the vegetative centers. Similar changes were induced by repeated injections of substances reacting with nerve tissue (i.e. acids and alkalies). No evidence was obtained that typical proliferative "coal tar cancer" of the epithelium can be so produced.</p> <p style="text-align: right;">W. A. FRIEDLBERG</p>																																																			
<div style="display: flex; justify-content: space-between;"> <div> <p>ASB-11A METALLURGICAL LITERATURE CLASSIFICATION</p> <p>SECTION SYMBOLS</p> <p>SECTION MAP ONLY ONE</p> </div> <div> <p>SECTION SYMBOLS</p> <p>SECTION MAP ONLY ONE</p> </div> </div>																																																			

USSR/Medicine - Immunology

Apr 50

"Discussion", Prof A. V. Ponomarev

"Trudy 5-oy Bessil, Ak Med Nauk SSSR" pp 133-134.  
Conference held 23 - 27 Dec 48, in Moscow, on  
problems of immunity and influenza.

The science of immunological reactivity was on the  
whole created through efforts of USSR investigators.  
Importance of immunological reactivity was estab-  
lished by speaker on horses inoculated with tetanus  
antitoxin. A year later the horses were rein-  
oculated whereupon the titer of their antitoxin  
increased 1,000-fold and they became extremely

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USSR/Medicine - Immunology (Contd 1)

Apr 50

efficient producers of antitetanus serum. Immunity  
after the 1st inoculation develops slowly, but  
the reactivity is increased, so that subsequent in-  
oculations made after a long time have a stronger  
effect. The same principle can be applied in bring-  
ing about immunity to tetanus in humans. These re-  
lationships also hold in the case of combination  
anavaccine (typhoid-paratyphoid vaccine plus tetanus  
anavaccine). When the solar plexus is exposed  
to the action of ultra-short waves, the titer of  
sp antibodies is increased many times without in-  
troduction of antigen into organism. In general,

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USSR/Medicine - Immunology (Contd 2)

Apr 50

PONOMAREV, A. V., PROF  
antitoxic or antibacterial immunity should be re-  
inforced by carrying out a 2d inoculation (nasally  
rather than subcutaneously) after 2-3 yrs.

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professor, nauchnyy rukovoditel'.  
Khabas, I.M.; AVRINSKAYA, I.P., direktor; PONOMAREV, A.V.,  
Immunization of adolescents against diphtheria by a combined sub-cutaneous  
and intra-nasal method under the control of the schick reaction. Zhur.mi-  
krobiol.epid.i immun. no.4:14-17 4p '53. (MLRA 6:6)

1. Leningradskiy nauchno-issledovatel'skiy institut vaktsin i syvorotok Mi-  
nisterstva zdravookhraneniya SSSR. (Diphtheria) (Vaccination)

TER-OGLIOVA, M.Z.; KHABAS, I.M.; AVRINSKAYA, I.P., direktor; PONOMAREV, A.V.,  
professor, nauchnyy rukovoditel'.

Intra-nasal revaccination of children with purified diphtheria anatoxin.  
Zhur.mikrobiol.epid.i immun. no.4:18 Ap '53. (MLRA 6:6)

1. Leningradskiy nauchno-issledovatel'skiy institut vaktsin i syvorotok  
Ministerstva zdorovookhraneniya SSSR. (Diphtheria) (Vaccination)

PONOMAREV, A. V., BRYZGALOVA, V. A.

"Effect of certain antibiotics on the immunobiological processes  
in the organism."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists  
and Infectionists, 1959.

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 1, p 169 (USSR) SOV/137-59-1-1241

AUTHOR: Ponomarev, A. V.

TITLE: Employment of New Grades of Steel and Introduction of Progressive Process Procedures (Primeneniye staley novykh marok i vnedreniye progressivnoy tekhnologii)

PERIODICAL: V sb.: Materialy Soveshchaniya glavn. metallurgov z-dov i in-tov avtomob. prom-sti. Nr 3. Moscow, 1958, pp 44-46

ABSTRACT: A brief communication on work performed at the Central Laboratory of the Gor'kiy Automobile Plant during 1956.

T. F.

Card 1/1



KURTOV, I.F., kand. tekhn. nauk; PONOMAREV, A.V.; ZAKHAROV, V.A.; CHICHAGOVA,  
N.P.; SVESHNIKOV, D.A.

Casting crankshafts. Avt. prem. no. 12,33-37 D '58 (MIRA 11:12)

1. Ger'kovskiy avtozaved.  
(Founding)

SOV/113-58-12-11/17

AUTHORS: Kurtov, I.F., Candidate of Technical Sciences, ~~Ponomarev~~,  
A.V., Zakharov, V.A., Chichagova, N.P., Sveshnikov, D.A.

TITLE: Experience in Manufacturing Cast Crankshafts (Opyt izgotov-  
leniya litykh kolenchatykh valov)

PERIODICAL: Avtomobil'naya promyshlennost', 1958, Nr 12, pp 33 - 37  
(USSR)

ABSTRACT: At the Gor'kiy Automobile Plant, the casting of crankshafts  
for the engine of the "Volga" automobile has been developed.  
The casting of crankshafts reduces the consumption of metal.  
A comparison of a forged and a cast shaft is given in Table 1.  
The chemical composition of the metal and the thermal pro-  
cessing are very important for the casting. The cast iron  
should contain a high percentage of manganese and chromium  
and a low percentage of sulfur (Table 2). The iron is pre-  
pared in the basic furnace DSN-3. As a furnace charge,  
cast iron types LK-4, LK-3, LK-2, ferro-chromium Khr6, etc,  
are used. The cast iron is modified by metallic magnesium  
in the autoclave under a pressure of 5.0-5.5 atm. The  
casting molds are made of a mixture of 92% quartz sand,  
type K-70/140, and 8 % powderized bakelite. The molds are  
manufactured on an automatic two-position machine AKF-2

Card 1/2

Experience in Manufacturing Cast Crankshafts

SOV/113-58-12-11/17

(Figure 3). The hot molds are taken from the conveyer and put into special adjusting devices for cooling (Figure 4). After this they are fastened with cramps on a conveyer (Figure 6). The casting is done in a horizontal position (Figure 7). Table 3 shows the mechanical properties of samples taken out of crankshafts. It has been shown that the wear-resistance is adequate. There are 8 photos, 3 tables, and 4 references, 3 of which are Soviet and 1 English.

ASSOCIATION: Gor'kovskiy avtozavod (Gor'kiy Automobile Plant)

Card 2/2

PONOMAREV, A. I.

Distr: 4E4j/4E2c(j)/  
4E3d

Synthesis of methyldichloro(m-trifluoromethylphenyl)silane. A. L. Kucharskii and A. I. Ponomarev. *Khim. Nauka i Prom.* 2, 535-6 (1957). — A 3-necked flask with a reflux condenser the upper part of which was cooled with solid CO<sub>2</sub> was charged with 16.2 g Mg and 150 ml. abs Et<sub>2</sub>O and swept with O-free N 30 min. The reaction was activated with iodine. About 5 g. m-BrC<sub>6</sub>H<sub>4</sub>CF<sub>3</sub> (I) was added dropwise while stirring, the soln. brought to boiling, and 145 g. I in Et<sub>2</sub>O was added during 2 hrs. to yield 85-95% m-MgBrC<sub>6</sub>H<sub>4</sub>CF<sub>3</sub> (II). In a similar assembly contg. 500 g. Me<sub>2</sub>SiCl<sub>2</sub>, swept with N and heated to 45-50°. II was added dropwise over a period of 12 hrs. and stirring was continued 12 hrs. at 45-50°. The soln. cooled in an atm. of N and filtered yielded 60% (based on I) Me(m-CF<sub>3</sub>C<sub>6</sub>H<sub>4</sub>)<sub>2</sub>SiCl<sub>2</sub> (III), b.p. 115-16°, n<sub>D</sub><sup>20</sup> 1.4654, d<sub>4</sub><sup>20</sup> 1.3385. To a mixt. of 20 g. III and 10 g. Me<sub>2</sub>SiCl<sub>2</sub> in 300 ml. Et<sub>2</sub>O at 10° was added dropwise with stirring 100 ml. Et<sub>2</sub>O maintaining the temp. at 10-20° for 2 hrs. to give 85% of product. The product was purified by distillation. Yield 50%. I was purified from triethylamine and still 10% of m-BrC<sub>6</sub>H<sub>4</sub>CF<sub>3</sub> was found in the product. 37-44°

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3

gag

*PONOMAREV, A. I.*

VLASOV, A. P., inzh.; PONOMAREV, A. I., inzh.

High-frequency metallization. Vest. mash. 38 no. 4:59-62 Ap '58.  
(Metal spraying) (MIRA 11:3)

PONOMAREV, B.

The present-day international situation and the struggle for  
unity in the labor movement. Vop.ekon. no.5:3-26 My '56.

(MLBA 9:8)

(Russia--Foreign relations) (Socialist Party)

POIKOMAREV, B.

Norms of natural losses in retail trade. Sov. torg. 33 no.7:59-61  
Jl '59. (MIRA 12:9)  
(Retail trade)

PONOMAREV, B.

"Fowl plague and the fight against it"

SO: Vet., Jan. 1952, Unclassified.

Frunze.(Ministry of Agriculture, Kirgiz SSR, Administration of Agricultural Propaganda)



MEDVEDEV, I.D., prof.; CHISTYAKOV, F.A.; KRYUCHKOV, I.; GOROBETS, A.V.;  
MERKOTAN, V.; PONOMAREV, B.

Throughout the Soviet Union. Veterinariia 36 no.6:94-96  
Je '59. (MIRA 12:10)  
(Veterinary medicine)

PONOMAREV, Boris Aleksandrovich; KAMINSKIY, Ye.A., red.; YEMZHIN,  
V.V., tekhn. red.

[Electric measurements]Elektricheskie izmereniia. Moskva,  
Gosenergoizdat, 1962. 54 p. (Biblioteka elektromontera,  
no.73) (MIRA 16:1)

(Electric measurements)

PONOMAREV, B.A.

Experimental investigation of stress-deformation state in the  
supporting sections of an autoclave model. Sbor. trud. LIIZHT  
no.229:123-130 '64. (MIRA 18:8)

PONOMAREV, B.A.

Experimental investigation of pressure in an autoclave used  
in the construction industry. Sber. trud. LITZHT no. 192:267-  
278 '62. (MIRA 16:9)